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LEHIGH'S ATHLETIC POLICY COMPARED WITH THE NEW RULES OF HARVARD, YALE AND PRINCETON

The new athletic rules announced on September 23rd as adopted by Harvard, Yale and Princeton, to go into effect January first, 1923, are of extreme interest to Lehigh men as they follow in so many particulars the regulations under which Lehigh has been working for a year past. They show a sane attempt to solve the evils that have crept into and have been threatening the very life of college sport, especially that king of sports—football.

To show the points of similarity let us consider these rules promulgated by these three universities and compare them with the rules of the Alumni Committee on Athletics of Lehigh, which rules are being carried out with the cooperation of Faculty and Trustees.

First.—FINANCIAL ASSISTANCE.

The rules just announced require that the sources of revenue of every athlete shall be known to the joint committee of the three universities and unless the sources of this support and the motives governing the giving of financial aid are approved the athlete is ineligible for the Varsity teams. In other words there must be publicity of sources and motives, thus precluding the possibility of men receiving financial aid purely as a return for athletic ability.

At Lehigh we have the same publicity of sources and motives, only we go a step further. Not only the Executive Committee but the administration, faculty, alumni and student body have access to this information. It is known who the men are and what they receive. Every bit of that aid must not only be known but must pass through the hands of the executive committee. Most of it comes through the medium of a Student Self-Aid Bureau, the money being earned by the boys needing help under the supervision of the executive committee. All of this money must be paid into the treasurer of the committee and disbursed by him on the basis of the work done by the various boys. Any boy failing to do his share in the work assigned is dropped. As every one in college knows who the boys are and also knows just what the business activities of the association, it is impossible for any man to shirk without the whole college knowing it.

The advantage of the Yale, Harvard and Princeton agreement is that they are checked by their rivals and are therefore less subject to temptation to break the rules. Lehigh has been attempting for a year and a half to get her athletic rivals into a joint agreement and this may come.

The weakness of the Yale, Harvard and Princeton agreement is that the committee is dependent for its information on statements made by the athletes themselves, which may lead to lying and hypocrisy. At Lehigh we know about every man without asking him any questions and will continue to know as long as our alumni and friends cooperate as they have during the past year.

Second.—Scholarships.

"Award of all scholarships, prizes and loans must be approved by a duly authorized committee—and published in the catalogue of the University."

At Lehigh all such awards are subject to the approval of a duly authorized committee and must be reported at a public meeting of the Alumni Council each June.

Third.—Athletic Status of Transferred Students.

A man transferring from another college cannot represent Harvard, Yale or Princeton in any sport in which he represented his former college on any Varsity or Freshman team.

At Lehigh such a man is only debarred for one year, but he is debarred from playing on any Varsity team during that year. This rule adopted by Harvard, Yale and Princeton is stronger than ours and will be more effective. However, our committee's policy is to discourage men from transferring from other colleges to Lehigh and in at least a dozen cases during the past year men have been told frankly that we preferred that they remain at their own college and that we did not want them at Lehigh. Only one of these men matriculated at Lehigh and in his case the committee

refused to even send him an application blank for admission or give him any information as to entrance requirements. He was simply referred to the Registrar and no further attention paid to him.

Fourth.—Proselyting in Preparatory Schools.

"The three universities wholly disapprove of all propaganda either through special inducements or through disparagement of other institutions to induce boys in schools to go to a particular institution." The defraying of the expense of a boy in visiting the college may be considered a reason for declaring him ineligible.

This rule is stronger than is Lehigh's, We encourage the schoolboys to visit Lehigh as we feel that a day or two on our beautiful campus and in association with our undergraduate body will make most boys want to come here. We do not offer inducements to boys to enter Lehigh, but if any of them say they must work their way through college, we tell them exactly how other boys are defraying part of their expenses. If a boy then expresses a desire to enter Lehigh and to become a member of the Students' Self-Aid Association, he is told that his character and scholastic ability must be first investigated as well as the financial status of his parents or guardian. Unless the committee is thoroughly satisfied on all three points he cannot become a member of this association of boys whom we are helping to help themselves.

Fifth.—Coaching System.

We agree exactly with the rules laid down and are probably more thoroughly in accord with them than any of the three universities mentioned. Our football team, baseball team, track team, and cross-country team are all coached by regular members of the faculty and not by seasonal coaches.

Sixth.—FOOTBALL GAMES.

The only point in which we are not in exact agreement is that we allow football practice to start two weeks instead of one week before college opens.

Seventh.—ATHLETIC SCHEDULES.

The three universities advocate scheduling as far as possible only such teams as have the same eligibility rules and training methods.

Lehigh joined last year an association of colleges formed under the auspices of the National Collegiate Athletic Association which hopes to work out a common set of rules governing these points which all colleges in the association will subscribe to.

Eighth.—ATHLETIC PUBLICITY.

The three universities are to make an

effort to lessen undue emphasis on athletics in general and football in particular.

The Lord knows Lehigh does not need this rule. We don't get any undue publicity.

Of course the Lehigh system is not perfect either in its conception or its working. Neither will the new system adopted by Yale, Harvard and Princeton work perfectly. But at least each is a step in the right direction. We are rather proud of the fact that we took our step a year in advance of any college in the East and did not wait for some one else to lead the way. We propose to try for continued improvement both in the system and in its operation. One thing that many of us hope to see in the near future is a Freshman rule and Freshman teams. Lack of playing space is all that has prevented an earnest advocacy of this in the past.

The basis of our whole system is pub-We publish exactly what we are doing and tell about it in detail to our athletic rivals. For instance, Lafayette has been told fully of our system and how it is worked. We invite constructive criticism for we want to improve our methods. At the same time we want something sufficiently buusiness-like and practical so that there will be no excuse for underhand methods on the part of any alumnus or supporter. We believe that the elimination of hypocrisy, of subterfuge, of cant and of downright lying is the first and greatest step in cleaning up college athletics. If the colleges don't develop character they have no excuse for existence, for education without character building is a menace rather than a benefit to our country. If you start by seducing and undermining the character of the athletes, who are naturally the college leaders and idols, you kill at one blow all the influence of the college on the student body and break down all worth-while standards. Our system at least has the virtue of honesty, frankness and fearlessness. It will only fail if we are weak enough to value victory in athletics more than we value the good name of the University and the future of the thousand boys she has in her care. Even in the face of defeat, dare we let it fail? I submit this for your careful consideration, alumni of Lehigh, for if it fails we are the chaps who must shoulder the blame.

Do you want clean athletics and real Lehigh teams? If so, what are you doing to help in the work? Remember that unless there is a strong alumni sentiment, backed by alumni effort, abuses are sure to creep in to any system. For the men who value victory more than they do Lehigh's fair name, like the poor, are always with us.

PRESIDENT RICHARDS TALKS OF LEHIGH AND HER FUTURE

Address Before the New York Lehigh Club, October 28, 1922

"On the breast of old South Mountain, reared against the sky,

Stands our noble Alma Mater, stands our dear Lehigh,"

which for nearly three score years has contributed to the advancement of the intellectual, spiritual, economic and industrial life of America. Organized as a University, she has fostered the arts and sciences and cherised the culture of the past; and as a pioneer in the field of technical education she has done much towards the development of engineering science and the creation of its literature. From the beginning Lehigh has developed and maintained fine traditions and standards of scholarship and in her technical curriculums she has laid a broad foundation of knowledge of science and its application which is essential to the successful practise of engineering as a profession rather than as a vocation.

Always recognized as an outstanding college of technology, Lehigh's fame has been greatly enhanced by the achievements of her graduates, an astonishingly large number of whom are occupying positions of prominence and responsibility in many fields of activity. Their success is an eloquent testimonial to the fine influence which the University has exercised in the advancement of our national life through the preparation of men for positions of real leadership. Lehigh's sons have played a leading part in the development of the technical industriesmining, metallurgical, chemical, electrical and mechanical—and in the conservation of our natural resources; while many of them have attained positions of eminence in the fields of business, literature, theology, medicine and science. Among her graduates are a considerable number of men who are active in the political, industrial and business life of foreign countries, so that wherever intellectual accomplishments are valued Lehigh's name is favorably known.

For the enlightenment of those unfamiliar with its organization, it should be noted that the University includes three colleges—the College of Arts and Science, the College of Business Administration, and the College of Engineering. In the College of Arts and Science there is a curriculum in Arts and Science which

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is similar to the traditional college curriculum. In addition, this college administers a pre-medical course of four years, which forms a splendid preparation for men who expect later to specialize in medicine; and especial attention is given to the preparation of men for the teaching profession.

The College of Business Administration offers a curriculum which is so planned that students may select subjects of use to them in preparation for the law or as expert accountants, or for those who desire to enter the banking or investment business, or to become qualified for executive positions in industry or in foreign trade.

The College of Engineering offers eight distinct curriculums, including Civil Engineering, Mechanical Engineering, Metallurgy, Mining Engineering, Electrical Engineering, Chemistry, Chemical Engineering, and Ship Construction and Marine Transportation, the nature of which is familiar to each of you. Graduate study, leading to the degrees of M.A. or M.S., is offered in various lines of work.

For the present academic year about two-thirds of the total enrollment of 986 students is in the College of Engineering, the remainder being distributed almost equally between the other colleges. Lehigh has always been classed as a small institution and it is probable that her present enrollment will never be materially increased. While it is, of course, inspiring to see any successful organization grow in size, it is by no means certain that the mere size of an educational institution affords any real advantage, and it is the opinion of many educators that the advantages of the small college far outweigh those of the larger ones; thus, in the small institution, it is possible for the students to become more intimately acquainted with each other and with their instructors, and to keep the size of classes within bounds so that the highest scholastic standards may be maintained. In the future development of Lehigh, however, it may be found desirable to increase the enrollment somewhat in order that the various colleges may each have a sufficient number of students to justify the maintenance of those advanced

courses which are required in the various curriculums and to inspire the faculty with that enthusiasm for advanced study which is essential to large achievements. No study seems to have been made of this matter but I have requested committees from the three colleges to advise me concerning the minimum and maximum number of students in each college which will insure the most efficient conduct of the work of these organizations. It may be found that instead of one thousand students the number in the University should be somewhat increased, although, as I have indicated, it is unlikely that Lehigh will ever aspire to enter the class of large institutions. It is our ambition to have quality rather than quantity production of graduates.

Engineering education began with an attempt to graft some work in science and its technical application upon the traditional college curriculum, with results which were generally unsatisfactory. It progressed to the period of ultra-practical instruction which, while adapted to the times, was better suited for training in the vocation rather than the science of engineering, and to the present period specialization, excessive technical which is more likely to produce experts in technical details than men capable of developing the broadest vision of the future of our industrial and economic life and the responsibilities of the engineer thereto. That the need of such men will lead to a further modification of the requirements of the technical schools seems inevitable. Thoughtful leaders among engineers recognize the necessity for certain modifications in the preparation of men for engineering service if engineering is to become a learned profession comparable with law or medicine. If we can develop real leaders, whose knowledge will enable them to effectively cope with the complex technical, social and economic problems of society, there is much greater likelihood that our present institutions will prosper and endure. Because of his knowledge and experience the engineer in the future must play a larger part than formerly in great constructive movements, and the colleges should, therefore, lay a proper and broad foundation for his future work.

Because of the nature of its organization, Lehigh University has unusual opportunities for conducting experiments in the field of technological education. Unlike many of the larger universities, her College of Engineering is now, and probably always will be, of chief importance. In consequence, the work of the other

colleges to a larger degree than is customary is coordinated with that of the College of Engineering. It would seem, therefore, that the presentation of the work of these other colleges will more likely be designed to fit the requirements of engineers than is the case in a majority of institutions. I feel convinced that it will not be long until there will be a radical revision in the methods of training men for the profession of engineering, and that the engineer of the future must be a better educated and more broadly trained and cultured man that he is likely to be if the present curriculum is con-While I, of course, recognize tinued. that no one institution can make a radical change in methods of instruction and requirements for graduation, I hope that Lehigh may take a leading part in urging upon the technical schools of the country such revisions of the curriculum as will bring about the results which I feel are essential in the training of men for professional work in engineering.

Few institutions in America are more favorably situated than Lehigh for the development of men for service in engineering and technology. Located as she is at the center of the greatest industrial district of America, she has at her doors a bewildering variety of industries, each of which is interested in, and to a certain extent dependent upon, the work of this and other similar institutions. These industries afford unusual opportunities for the student to become familiar actual engineering work and to supplement the work of the classroom by personal observation and practise. Many of the large industrial plants near the University permit the use of their equipment for experimental work and I have no that arrangements to conduct scientific research in some of these plants can easily be effected. Because of the fact that the institution is so well known and favorably located, its student enrollment has become decidedly cosmopolitan. The enrollment for the last academic year included students from 34 states and 11 foreign countries. This condition is an altogether desirable one, for it tends to break down sectionalism and to promote cordial relations between the residents of different states of our own country and with the people of foreign countries.

In the past the University has devoted its efforts almost exclusively to teaching. By common consent it has been recognized that the time has now come when the institution, in addition to disseminating knowledge, must make a definite forward step and take her place with other

great institutions in its advancement. In consequence of this determination, it is our hope that within a relatively brief period it will be possible for the University to place scientific research, in every branch of learning represented in its organization, upon a plane coordinate with that of its teaching activities. The importance of scientific research is more definitely appreciated today than at any previous period in history, and despite the marvelous achievements in science during recent years it must be recognized that we are only at the beginning of knowledge.

Those concerned with the future of Lehigh University are now dreaming dreams for her development. Before the end of the present academic year it is my hope that I may lay before you a comprehensive plan for the expansion of the University's activities which will be so appealing that you will find it worth working for. Without doubt the needs of the University are large. If she is to main-

tain the admirable position which she has held in the past and extend her activities into the field of scientific research and productive scholarship, large additions to her physical equipment, both in buildings and apparatus, as well as to its personnel will be necessary. I have repeatedly asserted that a Mark Hopkins on one end of a log no longer constitutes a University capable of coping with the educational needs of the day. Such institutions must now be provided with adequate facilities in buildings, equipment and endowment, and with faculties of highly expert specialists, for they must encourage and promote scholarship by every possible means if they fully discharge their obligations to society.

The standards set by other institutions cannot be ignored. Lehigh must either go forward, or relatively, she will go backward; she cannot stand still and long retain her old-time prestige. I know it is your hope that hers may be a great and glorious future.

NEW YORK LEHIGH CLUB

Dinner to President Richards at Hotel Astor, October 22, 1922 CHARLES M. SCHWAB LEADS OFF IN THE AFTER-DINNER SPEECHES

New York has the habit of pulling off big Lehigh dinners. The one with General Goethals as guest of honor, which S. B. Knox, '93, engineered while Goethals was building the Panama Canal, is a sample. And "Hank". Scovil, '98, and "Norm" Merriman, '05, stirred the metropolis with their "vaudeville" dinners to C. M. Schwab, E. G. Grace, '99; Arch Johnston, '89, and Alvan Macauley, '92. However, the present president, L. D. Rights, '93, has shown that he and his able coadjutors on the Board of Directors, to say nothing of Morton Sultzer, the live wire Secretary, must also be counted in as big-time artists.

The dinner at the Hotel Astor on October 28, which welcomed President Richards to the "Great White Way," was surely a corker and was a fitting climax to the series of big dinners which the New York Club has held during 1922. The music was furnished by the Lehigh Orchestra, composed of undergraduates, and they certainly gave a fine performance. Hanged if I can remember the boy who led the cheering but he was a corker anyway. As to the singing, a perfectly gorgeous glee club sat at the "Song-Birds" table and, aided by the oil provided by George Baily, '04, and Quincy, '66, their music machinery never failed to function.

The first speaker was Charles M. Schwab, Eng.D. (Hon.) '14, Trustee of Lehigh University and favorably known

in the steel trade. "Charlie" said he wasn't prepared to make a speech, but who would not rather listen to "C. M." when he isn't prepared than to anyone else after a week's rehearsal? He sure is the one best bet when its comes to after-dinner talkers.

Not being prepared of course reminded him of a story. A Presbyterian clergyman was telling Father John of how carefully he wrote and rewrote his sermons. Father John told him it was a great mistake as the devil then knew what he was going to say and would put into the minds of the congregation thoughts to offset and destroy the effectiveness of the sermon. "Now," says Father John, "when I get up to preach neither the devil nor I know what I am going to say." If "C. M." meant to apply the analogy then his stories were as new to the devil as they were to us and his Satanic Majesty doubtless had several hearty chuckles, especially about the one where the "old residenter" asked Schwab, who he had known as a boy, if he was making as much as \$6000 a year. When Mr. Schwab admitted the soft impeachment the old man exclaimed, "Don't it beat hell what luck and cheek will do for you in this world."

He told of his twenty years in the Lehigh Valley and how since he cast his fortunes there everything he had undertaken had been successful. "One of the greatest things that the Lehigh Valley has given me is E. G. Grace, and nothing

makes me so happy on the eve of my retirement as to know the mantel will fall on Grace's shoulders. No man stands higher in the American business world than Grace and he owes much of his success to Lehigh University. I am proud that one of the first degrees I received was from Lehigh. Proud also that Lehigh is broad enought to recognize education, no matter how or where acquir-

"I have not lived forty years in the world of business without learning to judge character. I predict for the new president of Lehigh a success that will measure up to the standards of the great university from which he comes. He can feel assured that we all, alumni and trustees, will stand by him and his policies. I predict for him the same measure of happiness and success in the Lehigh Valley as I have found there. everything I will stand behind Dr. Richards and aid him in achieving this success. Let us preserve the great traditions of Lehigh. In times to come may we take delight in remembering this evening in New York when we welcomed Dr. Richards as the president of our distinguished University."

President Richards in response started by saying, "I can now call myself a Lehigh man. I am deeply affected by the cordiality with which I have been greeted by alumni, students, faculty and townspeople. I was warned not to expect it when it became known I was going East. A former colleague of mine who several years ago became president of an Eastern College once told me that when he went to the club he found icycles six feet long hanging from the ceilings. But at Lehigh the warmth of my reception inspires me as do the opportunities for service which the University presents."

Dr. Richards' address is printed in full elsewhere in this number.

Dr. E. E. Sparks, LL.D. (Hon) '09, President Emeritus of Penn State, was the next speaker. He made a most humorous talk, telling of the happenings in his career as a college president which had especially amused him. One story, which was not of his own evperience, brought down the house. It seems that a traveling man stopping off at Battle Creek got into a sanitorium there, thinking it a hotel. He asked for supper and was told it was too late. "The dining room closes at seven." Getting up early, hoping to appease the demands of his appetite, he was told he was too early. "The dining room don't open until seven." He asked, "Who runs this place?" In a cold, dignified tone the place?" answer came, "The Seventh-Day Adventists." "Never heard of you. What do you do?" "We await the second coming of our Lord." "Well," said the traveling man, "you might as well shut up shop. If he stopped here once he'll never stop here again."

Dr. Sparks wound up his talk by saying, "I am a Lehigh man by virtue of an honorary degree from Lehigh. I congratulate Lehigh, Dr. Richards, on the vision you have shown here tonight in your talk on the way to build a great university. I congratulate you Lehigh men, too, on your success in securing such a president. I never regret the time it takes to catch a big fish. And you have caught one.

"Lehigh—Pioneer of a practical, liberal education, Conservator of all that is good—high on the mountain may she stand forever."

George W. Wickersham, '77, LL.D. (Hon.) '09, former cabinet officer and trustee of the University of Pennsylvania, was the next speaker. He laid stress on the great pressure that was being brought to bear on the colleges of today to take more and more men and to prepare them more thoroughly than ever before to solve the problems of our complex civilization. "Never has there been a time that teachers were so much needed as they are today and yet never has the reward of teaching been so small in comparison with the rewards in industry. It is much easier to get money for building than for endowment but I hope President Richards will try first for endowment rather than plant or equipment."

Chancellor John H. Bowman, of the University of Pittsburgh said, "To sum-marize President Richards" splendid educational talk his object seems to be to train engineers to succeed and be happy doing it. You have a man as your president who used to be my neighbor. He radiates confidence and inspires a desire to do something, to create something. On behalf of the University of Pittsburgh I want to congratulate Lehigh and express our good will to Dr. Richards."

E. G. Grace, E.E., '99, President of the Bethlehem Steel Corporation, spoke next. "The hardest job I ever had was to help find a president for Lehigh, and in all my experience I have never known a vacancy to be filled more satisfactorily. We Lehigh alumni have today the control at Lehigh we have been asking for. It entails a big responsibility. Dr. Richards is going to tell us before long what we have been wanting to know, namely, what is needed for Lehigh to continue to occupy her high position of leadership in engineering education. He has ideas. That is what we want. He will put those ideas in such a form that it will make us get for him whatever he needs to transform his ideas into tangible facts. Men of Lehigh it is squarely up to us and we are not going to fail."

President McCracken, of Lafayette made a play on the words of Lehigh's Alma Mater song. (By-the-way, he said nothing about "Oh, Lafayette, poor neighbor" which had been sung earlier for his especial benefit.) Turning to

President Richards he remarked, "In Lehigh's song you will find the lines 'Where the Lehigh's rocky rapids rush from out the west.' I hope, Dr. Richards, you will find them tranquil. Another line is, "All she wrests from Nature's store-house." You will note that Lehigh expects to make all the discoveries. If Dr. Richards can realize his dreams he will not only advance science and increase knowledge but help to solve all our national problems. And in this great work you alumni will have your share."

Samuel D. Warriner, B.S., '90, E.M. '91, President of the Lehigh Coal and Navigation Co., began by saying in contradistinction to C. M. Schwab, "Both the devil and myself know what I am going to say. Grace and I and several others were on a committee to secure a president for Lehigh who would be 100% That we have succeeded is a subject for congratulation. The alumni activity in this matter was really a demand for a greater alumni voice in the affairs of the University. The demand is in keeping with the trend of the times and it is proper that it was granted.

"When I first met Dr. Richards I was struck by his modesty. He told us frankly that unless the alumni stood behind him no arrangement he made with the trustees would enable him to succeed. I said to him, 'We alumni are just like mules. You've got to manage us so we can't kick but can only draw on the plow. It is our moral responsibility to draw on the plow with all our force under Dr. Richards direction so that his dreams for Lehigh's future may come true. future depends on us. shall we be known." By our fruits

After the close of Warriner's talk the two hundred diners closed a wonderful Lehigh evening by singing the Alma Mater.

NEWS OF LEHIGH CLUBS

TENTATIVE SCHEDULE OF DINNERS TO PRESIDENT RICHARDS

In arranging a schedule whereby President Richards can meet with our alumni in all the larger Lehigh districts I have had splendid cooperation from the club officers. The schedule as arranged is given below. Where a date is not finally and definitely fixed we have placed an asterisk.

-Southern Anthracite Lehigh Dec. 9-Club. (Pottsville, Pa.)

Dec. 16—Central Penna. Lehigh (Harrisburg, Pa.)

Jan. 9-Lehigh Club of Northern New York. (Schenectady, N. Y.) Jan. 10*—Lehigh Club of Western New

York. (Buffalo, N. Y.) Jan. 11—Detroit Lehigh Club.

Jan. 12-Chicago Lehigh Club.

Jan. 24—Washington Lehigh Club.

Jan. 25-Maryland Lehigh Club. (Baltimore, Md.) Jan. 26*—Philadelphia Lehigh Club.

Feb. 9-Lehigh Club of New England. (Boston, Mass.)

Feb. 10-Lehigh Club of Southern New England. (Hartford, Conn.) Feb. 16*—Lehigh Club of Northern Ohio.

(Cleveland, Ohio.)

Feb. 17-Pittsburgh Lehigh Club. Feb. 22*-Lehigh Club of Northeast Penna.

PHILADELPHIA LEHIGH CLUB Annual Lafayette Game Smoker

The usual big time stuff was pulled at Bookbinder's Restaurant on the evening of November 23. "Bernie" outdid himself in his notices which, in addition to a "Special Extra" of the Philadelphia Lehigh News, included three legal forms. One was a subpoena to witness; another an indictment of Lafayette, and the third a notice to jurors. They were all in proper legal form, cleverly worked out so as to include scores of shots at Lafayette and a few sly digs at our own "amour propre."

A crowd of fifty assembled, with a heavy sprinkling of younger members and a lively evening of songs and cheers was the result. The principal speakers were Colonel Horace Booz, Lafayette, '95; H. D. Wilson, '01, President of the Alumni Association, and the inevitable and apparently inescapable "Okey."

CUBA LEHIGH CLUB

The Cuba Lehigh Club held a meeting Havana on November 25, where, through the courtesy of Alexander Potter, '90, they received the news of the Lafayette game by cable. The meeting was held in the rooms of the Sociedad Cubana Advance notice of this de Ingenieros. came from the Secretary, J. A. Buch, '06, and A. T. Ward, '14. Ward's letter gave us the following news items.

Dick Peale, '13, and Rem. Peale, '17, spent a week in Havana early in Novem-

Galainena, '14, announced a short time ago the birth of an heir to the Galainena millions.

Thomas R. Leighton, '21, is now Asst. Mgr., Sun Development Co., Bueycito, Oriente, Cuba.

PITTSBURGH LEHIGH CLUB

The Annual Fall Outing of the Pittsburgh Lehigh Club was held at the Yonghiougheny Country Club on Novem-The Nominating Committee presented the following "slate" and although I have had no news of the outcome of the election, I reckon there is no doubt that the officers of the club now are:

President—Taylor Allderdice, '83. Vice-Pres.—P. H. W. Smith, '92. Secy.-Treas.—G. M. Baker, '07.

Lehigh University

BY CATHERINE DRINKER BOWEN

CHAPTER XIV

DISCIPLINE, HONOR SYSTEM AND STUDENT SELF GOVERNMENT

The Lehigh Burr remarked, in September, 1882, that "The Yale Record says the local press announces the opening of college by 'cigarettes are again on the street.' We think our distinguished contemporary, the Bethlehem Times, might have said very pat, 'flannel shirts are again on the streets'-But, boys, if you will wear them, do confine them to this side of the river, and not sit on the hotel

piazza looking like country drovers."

Ask any college professor which brand of boy he would prefer to teach, the cigarette brand or the flannel shirt variety. Right here we offer ten to one on the flannel shirts. Forty years have passed since the Burr made that remark, yet Lehigh still holds to the emblem of the flannel shirt—long may it wave! Engineers come to college to work. A writer in the Syracuse Post in 1895 spoke truthfully when he said, "From the first, Lehigh's characteristic has been her earnestness. It is the boast of her graduates, the inspiration of her students. Men go there to learn to take a useful part in the economy of life." The article bore the headlines, "How Lehigh University has Made its Popularity. Engineering is its Stronghold. Situated in the Heart of Pennsylvania's Industries—A College for Earnest Young Men."

These Earnest Young Men did not always prove as docile and easy to manage as the Syracuse Post writer would have us believe. Dr. Coppée, when he composed the very strenuous "Rules for Students" quoted in Chapter Two, had not in mind a flock of sheep. The gentlemen concerned, however, objected not so much to the requirements of the rules as to the ignominy of the rules being advertised in the Register, and to such public manifestations of discipline as the nine o'clock curfew. "Truly," says the college paper in 1890, "we might imagine we were getting our education from some medieval monastery at which the curfew bell is tolled every night and where the chapel tax is levied on the learned aks.''* These early champions of personal liberty may have likened the *The instructors had to pay an annual sum to the chapel fund.

University to a monastery, but it is to be doubted whether it would have been so characterized by anybody else in the town or country about. Certainly not by the Bethlehem police force, nor the proprietors of the hotels at which the Freshman and Sophomore banquets were—what shall we say—celebrated. Whatever rioting occurred, however, was staged outside the classroom. There was an occasional uproar in study assembly, such as that of 1876, when the Logic class, becoming desperate with boredom, stampeded the chapel,—but the Burr was justified in making the statement in 1881 that "Lehigh can congratulate herself that in the matter of disorder in the classroom, she has very little to complain of."

During the eighties and nineties, although classroom discipline was good, there existed a curious situation, curious because the offenders themselves were most anxious to change it. "It is hoped," said the Burr, in 1886, "that the Faculty will be successful in their efforts to do away with all manner of unfair means of passing examinations. These good wishes did not, however, bring success, for six years later the Lehigh Quarterly announced that "Ponying has gotten to be almost a college custom." It was also recorded that "a Junior, whose conscience is not perfectly clear, adds "& Co." to his signature in signing problems at the blackboard." Ponying was not considered dishonorable, it was merely a game of cat catch rat; the more you cheated, the luckier you were—if you didn't get caught. Harper Brothers advertised in the Epitome for eightyseven—large print—"Literal Translations of the Greek and Latin authors usually read in college, will be sent, postpaid, on receipt of one dollar per volume." The Faculty regarded this state of affairs according to their several

temperaments. We quote the Burr for 1882:

"Prof. Ringer, more in sorrow than in anger, 'Meester R., I gif you your exercise book, I gif you your pony, and then I gif you your zero.' (Applause and total collapse of the victim.)'

In the middle eighties the students began to cast around for some form of student organization which could effectively combat this situation. They talked about a student "Senate" such as was proving successful at Amherst. University of Virginia had established an Honor System in 1842, but it took more than fifty years for the idea to filter through to the New England colleges. In the fall of 1894, after many false starts, a college meeting was held which passed by a large majority the resolution: "We, the students of Lehigh Univiersty, do hereby pledge ourselves on our honor to abstain from all fraud in university recitations and examinations, and to take proper measures to prevent any infringements of the resolution." The Constitution provided to "body of ten men which shall be known as the Students' Court, the object of which shall be to investigate cases of fraud in University examinations and rectations. The court shall have power to recommend the proper punishment of the offender to the faculty of the University, but the court shall possess the right to reprimand the offender, particularly for the first offense, without reporting to the faculty. Every student shall be expected to report to this court any case of fraud or infringement of Lehigh honor in recitations or examinations which may come under his notice."

The Faculty gave their formal approval to this venture. At mid-year examinations, according to the *Brown and White*, the Honor System worked remarkably well, failing only where one or two suspicious professors continued the old tiptoe proctor system, thereby driving their students to cheat just from habit.

It was the last sentence of the Constitution quoted above that proved the sticking point. Nobody wanted to tell on his fellow, particularly as the informers' names were made public. A college meeting was held in the fall of 1897 at which it was decided that all evidence would be gathered and presented to the Honor Court by a Secret Committee of four. Half of the students entirely disapproved of this "intricate detective system," as they called it; but it was, as they said, "railroaded through," and went into effect the following January. During these four years many cases were tried, the students inclining always toward extreme severity, which was usually, however, tempered by a Faculty which knew that a good policeman makes the fewest possible arrests. One name which was always mentioned when the Honor System needed support was Robert Laramy ('96).

In the late nineties student support of the Honor System fell off, and in a few years it dwindled and disappeared. An instructor who it was claimed was responsible for the dismissal of nine boys for cheating, was given a severe ducking in the Lehigh River. The same newspapers which made much of this incident also delighted to enlarge upon the Freshman dinner held at the Sun Inn, Bethlehem, in 1902. This was the occasion of a terrific fight between Freshmen and Sophomores. Reading the account in the Philadelphia Public Ledger, one marvels that the entire hotel did not give way and collapse in the midst of the battle. The outside disturbances had no relation, of course, to the existence or non-existence of the Honor System as it was then understood. Nevertheless, the years of effective self-government are usually marked by a corresponding period of—more or less—peace and decorum.

The Honor System was again adopted in 1904, and gradually widened the range of its jurisdiction until it became a really operative organ of student self-government, capable of carrying quite drastic reform measures. For instance, at a college meeting in 1907 it was resolved that "No Freshman shall be hazed after 6 p.m. unless caught when voluntarily on the streets after 7 p.m." The enforcement of this rule was undertaken by the Law and Order Committee, made

up of the Arcadia (the supreme governing body) and the presidents of the three lower classes, whose business it was to handle all cases not coming under the jurisdiction of the Honor Court.

The object of the Arcadia, or Student Senate, as printed in its present

constitution, is:

"1. To furnish a body of students which shall represent the various living groups" (fraternities, sections of Taylor Hall, etc.) "and which shall be able to express the opinions and desires of the students."

"2. To promote student activities and to make rules and regulations for control over and relations between the same, except in so far as restricted by

faculty rulings."

"3. To administer the Honor System."....."The Arcadia shall have authority and it shall be its duty to take into consideration on its own motion, or upon charges preferred, the conduct of any student or body of students which may seem detrimental to the interest or good name of the University and having conducted an investigation, shall itself take or, where necessary, recommend to the appropriate authorities, such action as it deems just and reasonable, to the end that such detrimental conduct shall be properly reprehended and any repe-

tition of it prevented."

The Arcadia has not always run smoothly in its course. In 1913 the Honor Court recommended to the Faculty for something less than dismissal two students found guilty of cheating in examination. The Faculty refused to endorse the recommendation; the Arcadia resigned in toto. During the ensuing six years the Honor System was perhaps on the wane, but in 1919 it revived a somewhat drooping spirit, and a reorganization took place. A slight skirmish occurred between Faculty and Arcadia over the newly established principle that the names of those found guilty of cheating and recommended for suspension should be published on the Bulletin Boards and printed in the Brown and White. This the Faculty regarded as unduly severe, and when the next case came up Dr. Drinker appeared before the Arcadia in a meeting which one of the twenty-four members describes as truly dramatic, and pleaded for clemency for the delinquents. The students refused to yield and the Faculty accepted the decision of the Arcadia.

Students and Faculty realize that the life of the Honor System depends upon cooperation and sympathy between the two bodies. Mercer Tate, president of the Arcadia for 1919-20, writes that the Faculty was glad to give of its time not only on actual cases, but "different members were glad to consult with the students on bettering the System and on the whole problem which was faced. Among those men who gave of their thought to the problem, none will be better remembered than the late Professor Blake. He carefully sought to reach the bottom of all difficulties, reasoning out the points involved and striving to obtain justice. His remarks in the Committee rooms when the Committee from the Faculty would meet the Committee from the Honor Court always received the closest attention and the greatest respect. Hardly less were the other men on that Committee to be remembered: Prof. Miller, Prof. Stewart, and Prof. Thornburg. These men were fair and just, and the Honor Court had to present a clear case before they would accept their findings. One further tribute should be paid to Dr. Hall, who, although not serving on the Committee, was intensely interested in the work, and whose advice and counsel proved of great help."

Mr. Tate also writes—and this shows the esteem in which the Honor System is held among the students—that "in all but one case, tried during the year 1919-20, there was no feeling of bitterness on the part of one who had been found guilty. Several of the men have returned to Lehigh and are proving that they

have the stuff in them of which men are made."

The Arcadia in 1921 instituted a second degree punishment, called "Ostracism," for offenders not deserving suspension from college. The man "under Ostracism" wears a broad white band around his sleeve, and while he wears this band he cannot "talk to, nod to, or in any way recognize or associate with any

student in Lehigh University," nor can he take part in any college activities.*

Any member of the Student Body who in any way recognizes or associates with a man "under Ostracism" is "liable to similar or worse punishment by the Arcadia."

As far as the actual elimination of cheating goes, no one pretends that the Honor System is a complete success. It has the support of the Juniors and Seniors, but, as a member of the present Arcadia writes, in words which might have blown straight from the House of Lords in nineteenth century England,— "It seems to be a question of educating the lower classes to live up to the system." Entirely aside from the question of cheating, however, student self-government carries certain positive gains for the University. By establishing a standard of student self-restraint and self-respect it dispels much of the glamour surroundnig the college "bad boy;" cooperation between faculty and student shows the latter that discipline exists not merely to torment his leisure hours, but as a necessary spoke in the educational wheel. Sooner or later every small college or university learns that rules do not make discipline, that too many rules merely tempt insurrection, and those in command are only too glad to resign the reigns of discipline into the hands of the students. Even so small a college as Haverford found it impossible to preserve order by rule and regulation alone. President Sharpless, in his "The Story of a Small College," tells how disorder disappeared with the rule book and true discipline was experienced only when, after years of struggle, the students established their own standards of deportment and maintained these standards through self-government. Also, student self-government is a matter of economy in academic administration. Morris Llewellyn Cooke, of the class of ninety-five, who has made a searching and countrywide study of academic administration, showed that forty per cent. of the working time of the average college professor is given over to disciplinary duties. Surely this is not the case at Lehigh.

*The president of the Arcadia (R. R. Rhoad, '22) writes that "There are four such cases at the present time; these men are wearing the white bands and are living up to the rules."

LEHIGH MEN WHO WRITE

Prof. L. B. Chapman, Professor of Naval Engineering, Lehigh University, has recently written a book entitled "Marine Power Plant." This book has been adopted by M. I. T. for their Naval Constructors Course. A review of the book written by C. A. McAllister, Vice-President of the American Bureau of Shipping, highly commends this book and concludes by saying, "The greatest number of existing reliable text books on marine propulsion are by foreign authors, and it is therefore particularly pleasing that this book emanated from an American of such high standing as Professor Chapman."

Professor Thomas E. Butterfield, of the Department of Mechanical Engineering, has recently contributed the chapter on "Diesel Engines" for the revised edition of Robert L. Streeter's text, "Internal Combustion Engines—Theory and Design," which is largely used in engineering schools. It is expected that the revision of this text will be forthcoming early in 1923.

In our last issue we spoke of the new book of M. A. DeWolfe Howe, B.A., '86, which was soon to be published. This book, entitled "Memories of a Hostess," was given a front page review by Bliss Perry in the Book Review of the New York Times of October 29.

A paper entitled "The Storage of Bituminous Coal" was presented by Prof. H. H. Stoek, B.S., '87, E.M., '88, at the meeting of the American Iron and Steel Institute at New York, on October 27, 1922. Prof. Stoek is head of the Dept. of Mining Engineering at the University of Illinois.

Professor J. A. Mease, M.E., '05, and Professor G. F. Nordenholt, M.E., '14, have just closed a contract with the McGraw-Hill Book Company for the publication of their text on "Design of Machine Elements" which is to be ready for use in the Department of Mechanical Engineering next term.

"The American Mathematical Monthly" carries a solution of a problem proposed by T. M. Blakslee, which solution is by J. B. Reynolds, B.A., '07, M.A., '10.

The "American Legion Weekly" for November 3, 1922, has an article entitled "Making Prosperity Puncture Proof," by Gilbert C. Jacobsky, C.E., '07.

"SAUERKRAUT AND KINKS"

"The time has come, the walrus said, To talk of many things, Of shoes—and ships—and sealing wax— Of cabbages and kings."

A Few Cheers from England

South Woodville. St. Margaret's Road, Bowdon, Cheshire.

October 21, 1922,

Dear Okey:

For the last few years I have been reading with very great interest your messages as published in the BULLETIN. They have gone home and have very great interest your messages as published in the BULLETIN. They have gone home and have borne fruit, although you have seen no particular evidences of it. I have been wanting for a long time to send you a cheque so as to become a life member of the Alumni Association. I have put it off owing to the English pound being in such a weak condition and have been waiting for it to become convalescent. The exchange yesterday reached the highest point since the Armistice, and I decided that I would not wait any longer but would at once fulfil my duty to the University.

I have been living in Europe now for 21 years and have not been back to America during this time. I had planned to make a trip in 1914 and had actually booked my passage, when the War broke out and my Company requested me to stop here. During the War it was practically impossible to make a trip and since the War ended the steamship fares have been so high and the purchasing power of the English pound so low that the expense of a trip was considerably more than BULLETIN.

the expense of a trip was considerably more than

I cared to face.

I cared to face.

It is very encouraging to read your letters in the BULLETIN and to realize how the University has progressed since the days when I was a student, and that it maintains today its high scholastic record and its fight for purity in college athletics. In this connection I feel that the Universities in America owe a great deal to your personal efforts in fighting for the highest possible standard in college athletics, and I hope that you will continue the good fight, and that you will live to see conditions very much improved over what they

conditions very much improved over what they have beeu in the past.

The one thing that impresses me so much with university and school life in Great Britain is the The one thing that impresses me so much with university and school life in Great Britain is the fact that the students take their athletics for the pure love of the sport. I think I can say quite honestly that in the universities and in the best Public Schools there is not the slightest taint of professionalism. The men play the game because they love it and for the physical benefits they can derive from play. Games have always been an important part of school life at the universities and Public Schools because of the influence they have in moulding the character of the young men, and I only wish that our schools in America took up sport in the same honest fashion.

In the last issue of the BULLETIN I read of the inauguration of the new President, Dr. Richards, and it would seem that you are all satisfied that he is the right man for the job. I feel that we certainly have a good working Alumni Association, and I think that they can be of immense assistance to Dr. Richards in his new work, and that together he and the Alumni will be enabled to build up to a still greater degree of efficiency the affairs of our University.

I often look back with the greatest pleasure on the days spent at Lehigh. They are a remembrance that I cherish very fondly, Unfortunately there are very few Lehigh men on this side of the water, and the possibility of meeting each other is very remote. I am hoping that the time will not

there are very lew Lengh men on this side of the water, and the possibility of meeting each other is very remote. I am hoping that the time will not be far distant when I can have an opportunity of visiting the States, and when I do, there is one place that I will not fail to visit, and that is Letick

I would like very much to be able to see you personally and renew our old friendship, and to talk over with you about the boys with whom we lived, both in South Bethlehem and in Pittsburgh, and to hear what has happened to all of them. do hope that if you ever get over on this side you will not fail to look me up. and I hope that any Lehigh man who gets into the Manchester district will make a point of calling on me and I shall be

only too pleased to do what I can to entertain him.

I do not know whether your Alumni records of myself are up to date or not, but the necessary particulars of my present position are as follows: Business—Contracts Manager, Metropolitan-Vickers Electrical Company, Limited, Trafford

Park, Manchester.

Home address-At the head of this letter.

Home address—At the head of this letter.

I do not know who are living in Bethlehem at the present time, or what has happened to the people whom I knew during my college days, but if you run across any of my old friends, I hope you will not fail to remember me to them.

There are so many things that I might possibly write about that I hesitate to get started because I could not tell when my work would end. I, therefore, hope you will not mind my not dealing with the general questions of the day. I will content myself with expressing my appreciation of your work as Secretary to the Alumni Association, and I feel quite sure that if you have created in other men's minds the same train of thought that and I feel quite sure that if you have created in other men's minds the same train of thought that you have in mine, you have done a good deal to make the Alumni remember their University and be proud of it. My only regret is that I am so far away that I cannot join in the various meetings and celebrations which you have from time to time. When I read about them in the BULLETIN they all sound mighty good and I get a real old-fashioned homesick feeling.

I know you are a very busy fellow and I hesitate to ask you to let me hear from you, but should you have the time and inclination, a letter from you would be very much appreciated.

With kind regards.

Yours sincerely,

Yours sincerely,

J. C. WHITMOYER, '95.

A Voice from Africa

Central Africa, August 6, 1922. (Prof. Howard Eckfeldt, '95)

August 6, 1922.

Dear Skipper: (Prof. Howard Eckfeldt, '95)

It's a great life if you don't weaken, isn't it? I haven't weakened altogether yet, but I must say I am slipping a little, for I don't see a white man from one day to another nor hear any English spoken except my own damned profanity. Naturally my profanity has been greatly enhanced while my hold on civilization, a white man's veneer, and the niceties of life, have slipped like hell. You might say I am alone in my little piece of Jungleland with three villages and over 200 natives; men, women and children, who expect me-to clothe them, feed them, show them how to work, where to men, women and children, who expect me to clothe them, feed them, show them how to work, where to work, and why they should work. I have to settle all disputes from swiping to getting in the wrong grass hut with another man's woman, though why the other man should object I don't know, as he probably has anywhere from two to ten wives. They expect me to cure everything from toothache to insomnia. Fortunately I have not been called on as yet to participate in child-birth, but I know it's coming. I feel, however, that I will have to draw the line there.

draw the line there.

But to come to the point and the object of this letter. After I left, a letter was forwarded me from Stevenson and Knight pertaining to a position with the Bureau of Mines, which was made possible by your kindness in my behalf. However, at that time it was too late to accept the position, but I wish to thank you, Skipper, for your thought. You know I have to hand it to you for mentioning my name, for probably you more than any one else knew of my struggle to get through my Senior year and some of my subjects in my undergraduate years. It seems to me that I passed 35 out of 36 actual hours the second term, but was so fed up with exams that I didn't take Met. Problems, sort of didn't care whether school kept or not. What those thirty-six hours were now I couldn't tell you. Probably included a little arithmetic, manual

training and aesthetic dancing. Well, anyway, you knew I played with professors' babies, drank tea with their wives (when I was dying for beer), paid out money to tutors so they couldn't flunk me, took every damned summer school there was, sang songs with Irwin, told Matteson what pretty pink cheeks he had, steered clear of Baldy Stewart by writing many notes (not on his lecture of course), appeared interested with Fogg when I didn't know an orifice from a cantilever beam, had Payrow and Bennjie Miller over to the house for dinner, an orlice from a cantilever beam, had rayrow and Bennjie Miller over to the house for dinner, though that was a pleasure for me; smiled when Lambert hit me on the head yith his pointer; laughed at Windy Wilson's awful jokes; called on Prof. Charles' niece, especially got a chair next to Plug Richards once in the Pullman when he went Plug Richards once in the Pullman when he went to New York (he didn't even remember my name next week in class); talked birds and flowers with the chaperones at the University dances and occasionally battled through a dance with them, and did everthing even to a little studying to get through except break the honor system, which, by the way, I feel should be an absolute honor system or thrown out. None of this stuff about allowing five minutes only if a student wants to go out. Allow him five hours if he wants. If he doesn't finish then it's his affair, but then also it's a real knoor system. honor system.

finish then it's his affair, but then also it's a real honor system.

I remember once when you said to me, "Jaek, it's getting late, take that examination home and finish it there. I did. I finished it on my desk with the book on that subject right in front of me and, truth to tell, I didn't know the subject very well, but the thought of glaneing through that book never struck me. You trusted me and you made the honor system what it should be. However, I am frank to say, on the other side, that if some prof. told me I could only have five minutes to leave the examination room and kept marching up and down the aisle on the lookout, I'm damned if I wouldn't excuse and know that I never would report a man I saw cribbing. But I side-tracked again, Skipper, so let me say once more that you had nerve, knowing me to be the dumb-bell I am, to suggest my name to the Department of the Interior, and please once more accept my thanks. Will you, if you think of it, give Okey the address below, together with my best regards, and ask him to send me the BULLETIN? Also give my best regards to Professors Miller, Bartlett, Fogg, Payrow, Fuller, Lambert and the young Professor in the Metallurgy Department (not Roush), I forget his name though I know it well. (Am damned lucky not to forget my own here.) I have always had a warm place in my heart for them all and I guess, Skipper, you know that you always have my vote and warmest regards.

my vote and warmest regards.
Sincerely,
(L. F. Knight, '18)

JACK KNIGHT.

If you should ever care to take up the old pen and drop a fellow a line, it would be like "yes" to a once rejected suitor. My kind regards to Mrs. Eckfeldt, Emily and your son.

L. F. K., e/o "Forminiere," Dundu, Angolo, Via Tshikopo, Congo Belge,

It's not a song, Skipper, it's an address.

Mining in Australia

231 Wilson Street, South Broken Hill, Broken Hill, N. S. W., Australia,

September 23, 1922.

September 23, 1922.

Dear Bill: (W. C. Hartman, '16)

Arrived at Sydney, September 5, after an interesting trip of nineteen days on the old Pacific.

Aside from the acquaintanees made on shipboard and the few hours ashore at Honolulu and Pago Pago, the trip was without incident, calm weather prevailing practically the entire time.

The letters of introduction which Fraser (the chap I'm travelling with) had, took us from Sydney to Melbourne, at which latter city we were promised employment here by the manager of the South Broken Hill Mine.

September 16th found us at our present location

September 16th found us at our present location and on September 20th, after a medical examination and some more red tape, we started in as

mullockers, i.e., laborers, with the understanding that we are to be shifted from one kind of work to another until we are familiar with all phases of both the underground and surface operations of the mine. At the present time we are helpers to the timbermen in two of the slopes on the eleventh

the mine. At the present time we are nelpers to the timbermen in two of the slopes on the eleventh level.

Working conditions are just about ideal over here for the laborer, in fact the government of the country is really a labor government. We work five days per week; on Saturday and Sunday the mine is shut down. We are supposed to put in seven hours per day, S.a.m. until 3 p.m., the employer paying for the lunch time of one-half hour. Actually though we put in about four hours at work. We pass the timekeeper at S.a.m. but it is 8.30 before the eage has the eleventh level men down. Once on the level we go to our slopes, have a smoke and bull awhile and it is 9 a.m. by the time actual work begins. About twenty minutes is lost during the morning for "blows," which means a smoke and a rest, and about ten minutes to twelve we knock off for "crib," i.e., lunch. It is 1 p.m. before we are actually at work again in our slope. At least ten minutes are devoted to "blows," during the afternoon and at twenty minutes to three we piek up our tools and go down to the entry on the level to wait for the eage. For these hours we are paid eighteen shillings per day and since board, which includes meals, room, laundry and mending, costs us but thirty shillings per week, our lot isn't half bad.

Specifically we are known among our fellow miners as Yanks, but generally speaking we are just comrade "blokes," bloke being the equivalent of our word "guy."

It is difficult to describe the frame of mind these chaps possess concerning work. They work like all hell let loose when they do work, but they want it understood that they can take time out when they want to and that their idea of personal liberty and freedom isn't to be in any way interfered with by the employer. This particular mine has been in active operation during the past year, but was closed down the full two years before by a strike.

This attitude is true of the entire country, and although it works marvels for the condition of the working man, it undoubtedly retards th

working man, it undoubtedly retards the industrial progress and development of the country.

Already we have decided to seriously consider

Already we have decided to seriously consider our next move and have selected South Africa for our field, provided we can secure a letter of introduction to a prospective employer there.

Needless to say, we haven't any such all vital letter in our possession, nor do either of us know a soul over in that neek of the woods. If you would care to mention our plight to Okeson, I would certainly appreciate it. I believe there are a few Lehigh mining men in South Africa and would certainly appreciate it. I believe there are a few Lehigh mining men in South Africa and armed with letters of introduction to them written by Okeson and with them forewarned by a direct letter from Okeson we ought to be able to land something, at least a job which would pay us enough to live on while we studied their mines and mining methods.

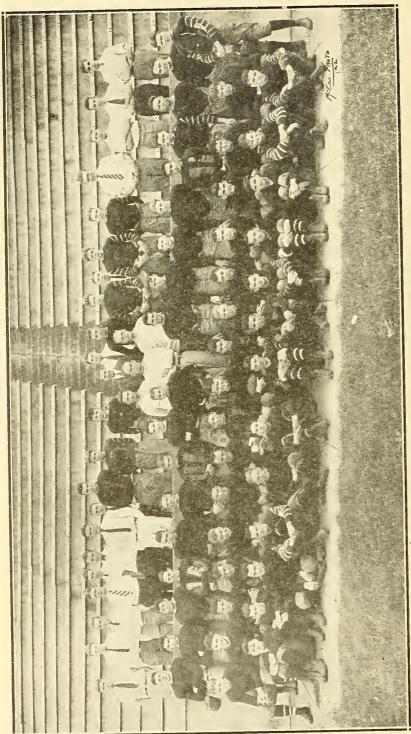
To anticipate some of Okeson's natural ques To anticipate some of Okeson's natural questions in regard to the situation, Fraser, whose full name is Hugh H. Fraser, is a graduate mining engineer of Penn State. Just previous to this trip he was editor of Coal Industry, published by Andresen & Co., Thaw Bldg., Pittsburgh. He has worked in and inspected quite a few mines in the East and West U. S. and it is his intention eventually to go into consulting mining engineering work of his own after this work abroad. In this conally to go into consulting mining engineering work of his own after this work abroad. In this consulting work he expects to associate with him a geologist and a civil engineer with mining experience. I am trying to qualify as the latter associate. That is the situation in brief.

About time to turn in, but before so doing—here's a few lines an Australian on the boat passed to me:

Sing a song of sixpence, a case full of rye, Four and twenty Yankees feeling awful dry; When the case was openeed, they all began to sing, To Hell with prohibition, God save the King!

With my best regards to you and Mrs. Hartman and hoping the junior member of the family has a good healthy pair of lungs, which I understand individuals of that age are given to exercising now and then, I am,

Sincerely, (H. D. Keiser, '16) Doc.



FOOTBALL SQUAD, 1922

Bottom Row—Lewis, Evans. Snyder, Brown. White, Haas, Pakenham, Nony, White, Wurster, Poliska, Dycke, Davis, Sebragger, Carlisle, Morgan, Bessemer, Henschen, Cusick (Capt.), Mellinger, Lingle, Sanford, Miller, Johnson,

Third Row—Tyson, Davis, Storer, Frauenheim, Stevens, Hendersbett, Harper, Burke, Werkt, Walker, Alwine, Malis, DeHart, Lewin, Looker, Gruhn, Shigo.

Fourth Row—Coaches Larkin, Baldwin and Leech.

Top Row—Henry, Jones, Craig, Mgr. DuBois, Asst. Mgr. Rogers, Adams, Prior, Huggins, Cheel; Candidates for Asst. Mgr.: Astarita, Gibson, Sholes, Behr, Langfitt, Nicola, McWilliams, DuBois, A. C., Campbell, Glenn, Ross, Patton, Greene.

FOOTBALL

LAFAYETTE 3, LEHIGH 0

Hats off to the gamest Lehigh team that ever wore the Brown and White! After a season with an unparalleled succession of serious injuries in which they fought through one of the stiffest schedules we ever had, they went down to Easton crippled in everything but their spirit and fought one of the greatest teams in America to a standstill. For the first time in over two years Lafayette met a team whose goal line they could not cross. Only once for each team came an opportunity to score and that only by the air route. Lehigh's came in the first half and Lewin's drop kick from the 28 yard line while straight and true was too low. Lafayette's chance did not come until the last three minutes of play. Then Brunner, standing on the 27 yard line, booted it between the posts for the winning three points. It was the irony of fate that Brunner, who started to college at Lehigh in 1916, should six years later be the man to beat us. Or perhaps it was not him but the grinning "jinx" which has pursued us all season that is to blame. All during the game this goddess of ill-luck had stayed her hand and it seemed as though at last the tide had turned. But she had one more blow for us and with an evil grin she held it back until the game was almost over and delivered it through the medium of Brunner's educated toe. But what do we care. All we feel is exultation. The courage of that wonderful team has lifted us above the buffets of fate. They have given to us of their unquenchable spirit and that gift is worth a dozen football victories. In fact that spirit is the all in all that football has to give. And not an undergraduate nor alumnus but is today a better man for the lesson we have learned from a team which neither injury nor defeat nor insuperable odds could daunt.

Sixteen straight victories for Lafayette. Then a defeat by W. and J. by the narrow margin of 14 to 13. Then an overwhelming victory over Rutgers, which team had defeated us. Then Lehigh! A practice game it seemed for this powerful, almost unbeat-What is able team. The game is on! wrong with their smooth-running machine? Line plunges, double and triple passes, forward passes all smeared by this despised bunch of youngsters. A gain off tackle or around the end. Aha! Now we've started. Bang! A six yard loss. What the devil's the matter? "Let's go!" Bang! And Lehigh has piled them up again. But can these youngsters last! A week ago Mellinger and Read were just recovering from injuries that had prevented them playing all season. A week ago Henschen, Merrill, Hoffman and Springsteen, all badly injured, were being counted out as far as any more football this fall was concerned. But every one of these men finished the game. In fact not a Lehigh man was removed on

account of injury. Only three substitutions were made and two of these were only for a few minutes. That team was fighting just as strong at the finish as at the start. Bruised and banged and battered, they never quit.

Lafayette gained lots of ground and Lehigh gained but little. But time and time and time again Lehigh took the ball away from Lafayette on downs. In their own territory or in the middle of the field Lafayette gained rather easily, but let them trespass in Lehigh territory and it was a different story. In the first half especially they found their much vaunted attack to be futile. In fact Lehigh actually outplayed Lafayette in the first half, the playing being mostly in Lafayette's territory. Captain Cusick's wonderful kicking had much to do with this and a 22 yard run by Mellinger together with, later on, a 30 yard gain by a forward pass from Mellinger to Burke aided in putting Lehigh in position for a score. Lewin was injected into the game to try a drop kick but, as noted before, it went under the bar.

In the second half the Lafayette team gained more ground and Lehigh was wholly on the defensive. Not until Brennan and Gazella were removed from the game and Ernst (son of "Pop" Ernst. You remember HIM, old-timers?) and Millman took their places in the fourth quarter did the Lafayette machine begin to hit on all its cylinders. Even then the best they could do was a field goal.

Some fighting bunch of wild-cats, I'll say. And the ones who sat on the side-lines are just the same calibre. And only three or four in the whole squad of thirty men graduate this year. Watch your step, Lafayette! Next year the tide starts running the other way.

It was a hard, fierce game but remarkably clean and free from penalties. Every man played beyond himself and one Lafayette player remarked after the game, "I've played lots of football, but this is the first time I've ever played against eleven crazy men." And they certainly were in a state of exaltation induced by that tremendous psychic force known as "Lehigh fighting spirit." Lots of people have thought this much talked of Lehigh spirit is merely a myth. Sixteen thousand people left March Field on November 25th with a sure knowledge that it is a startling reality.

While it is not fair to single out any man when every man deserves the highest praise, nevertheless I must speak of Captain Arthur Cabot Cusick, who finished his football career by playing the greatest game of his life. His defensive work at tackle was remarkable, while his wonderful kicking was Lehigh's greatest asset. Referee Crowell said to Pazetti after the game, "I want you to tell Captain Cusick that I con-

sider him the finest man and best football captain I have ever seen." And that is praise "from Sir Herbert Spencer," for there is not a better judge than "Bill" Crowell nor one less likely to slop over.

In giving credit to "Bosey" Reiter, to Head Coach Baldwin and his assistants, Paul Larkin and Dick Leech, let us not forget the invaluable service rendered by "Pat" Pazetti, who worked the last two weeks with the team, teaching them the Lafayette plays and how to stop them. I think we should also thank Mr. Roy Lewis, the General Superintendent of the Bethlehem Steel Co., who listened to my plea to let us have "Pat" and generously gave his consent. And to the various college leaders, such as "Cupie" Hicks, President of the Arcadia; Howard Dubois, Manager of the Fotoball Team; "Tommy" Thompson, Head Cheer Leader, and a score of others must go unstinted praise for the remarkable way in which they awakened the student body. The "pep," the confidence, the determination exhibited during the week before the Lafayette game, culminating in the greatest smoker ever held at Lehigh, was enough to inspire any team. It proves again the old contention that a college will have the kind of team they deserve, for the team exemplifies on the field the character of the student body they represent.

Finally, let us pay our respects and give praise to the splendid boys who sat on the bench just aching to get in the game, and to the gallant scrubs, over whose bruised bodies the team learned how to "Stop Lafayette."

LEHIGH.		LAFAYETTE.
Walker	L. E	Berry
Merrill	L. T	Ford
Hendershott	L. G	Schwab
Springsteen		Ackroyd
Hoffman	R. G	Mitinger
Cusick	R. T	Deibel
Burke	R, E	O'Connell
Henschen	Q. B	Brennan
Mellinger	L. H. B	Brunner
Harper		
Greer		

Substitutions—Lehigh: Read for Walker, Lewin for Henschen, Henschen for Lewin, Hess for Harper. Lafayette: Conti for Ackroyd, Crate for Connell, Gebhart for Chickonowski, Ernest for Brennan, Miliman for Gazella.

Officials—Referee: W. G. Crowell, Swarthmore; Umpire, D. L. Fultz, Brown; Head Linesman, C. A. Reed, Springfield; Field Judge, C. J. McCarthy, Georgetown. Time of periods, 15 minutes.

RESULT OF THE SEASON'S GAMES

		Opp.	L.U.
Sept.	30—Gettysburg	0	0
Oct.	6—St. Francis	0	37
Oct.	13—Rutgers	12	7
Oct.	20—Brown	6	2
Oct.	27—Muhlenberg	7	26
Nov.	4—Colgate	35	6
Nov.	11—Bucknell	14	0

18—Lebanon Valley		6 0
Totals	79	84

SOCCER

The soccer team is at present tied with Swarthmore for first place in the Pennsylvania Intercollegiate Soccer League, each team having lost a game. Since our last issue the team has beaten Haverford, 3 to 0, and lost to Swarthmore, 2 to 1. Only one League game remains to be played, that being with Lafayette on December 16. In the meantime our team will play Princeton at Princeton on Dec. 2; Army at West Point on Dec. 6, and Navy at Annapolis on Dec. 9.

"BOSEY" REITER'S NEW STEED

At the big smoker the night before the Lafayette game the event of the evening was the presentation to Prof. H. R. Reiter, Head of the Department of Physical Education, of a Ford Sedan, bought for him by the undergraduate body. It was a well-earned tribute, showing the affection the students have for "Bosey". For a dozen years he has been close to them in their daily life and every boy with a skinned elbow, a boil on the neck or a cold in the head runs to "Bosey" for treatment. His big heart is always touched by the story of any boy's trouble and he is always ready to help to the limit of his ability. When discipline is necessary it is administered in such a kindly spirit that the recipient feels sorrier for "Bosey" than he does for himself.

One of the amusing features was the appearance of "Bosey's" old bicycle in a coffin shrouded in black. "Bose" was completely surprised but did not lose his speech-making ability. He apostrophized his gallant old steed, telling of the nine years of its service, "in winter's snow and summer's rain," and lamenting that it must go the way of all flesh. Mrs. Reiter was in the gallery and was called on for a speech. She responded by saying, "You can't expect to have two orators in the family. I hope that some day 'Bosey' will give me a ride."

TWO OF A KIND

"Dick" Morris, '89, sends the following clipping but admits he don't know where he got it. The first story was also published in a Chicago paper (I forget who sent it to me) and also appeared a month ago on the screen in various movie houses throughout the country. The question is "who is the Lehigh man, Class of '89, who wrote this paragraph:"

While reading a popular magazine several weeks ago, the scribe of The Journal ran across a "bull" that would provoke a smile anywhere. It was as follows: "It is in a cemetery at South Bethlehem, Pa., that this sign appears, 'Persons are prohibited from picking

flowers from any but their own graves'." This reminds the editor of a "bull" that he himself made in this same South Bethlehem when he was a freshman at Lehigh 37 years ago. In answering a certain question in hygiene examination, the editor wrote as follows, "By the judicious use of hot or cold baths, many persons have been known to avert the death of their ancestors." An attempted explanation would spoil the "bull," so we let it go as it stands, giving our fraternal word that the latter one was perpetrated precisely as stated.

FROM THE PUBLIC PRESS

The "Morning Press" of Bloomsburg, Pa., announces in its issue of October 31, that E. S. Stackhouse, '86, has been elected a trustee of Goucher College, the famous college for women, located at Baltimore, Md.

The "Pittsburgh Gazette Times," of October 18, carries a picture of Homer D. Williams, '87, President of the Carnegie Steel Co., and Alumnus Trustee of Lehigh University, and states in the accompanying article that he has been appointed a member of the Board of Public Education by the Judges of the Common Pleas Court.

The "New York Times," of November 25, as well as every other important paper in America, carried a big news article of the latest business exploit of E. G. Grace, '99, President of the Bethlehem Steel Corporation. Grace announced the day before the consummation of a big business deal through which Bethlehem Steel acquired the properties of Midvale and Cambria, giving Bethlehem a yearly output of over seven million tons of steel and making them second in size only to the U.S. Steel. Following so soon on the Lackawanna merger it gives some idea of "Gene's" capacity for hard work.

The "Engineering and Mining Journal-Press" of November 11, 1922, carries a picture of John T. Fuller, '03, General Supt., American Bauxite Co., together with a biography of "Jack's" interesting and adventurous life. As his friends know, he spent five years with the De Consolidated Company in the diamond mines of South Africa, where he was largely responsible for the ingenious method of underground mining that superseded the old open cut work.

The "Washington Evening Star," of November 11, has a big article headed "Novel Engineering Methods in Building \$7,000,000 Hotel." It states that H. C. Balcom, who had charge of all the engineering work in the construction of the Grand Central Terminal, New York City, and Case B. Rafter (Lehigh '13), are in direct charge of this engineering project.

GRADUATE ELMETS. PLEASE NOTE

By joint action of Trustees and Faculty the following resolution

has been adopted:

"Graduates who have previously been awarded the degree of Electrometallurgist may, upon written application, be awarded the degree of Metallurgical Engineer."

EXERCISE FOR ALL

November 14, 1922.

Dear Okeson:

Lehigh students are engaged in the following sports:

Prof. Fay C. Bartlett.	
Boxing 4	1
Apparatus 4	0
Fencing 1	8
Dancing 2	5
Swimming	0
Beginners class in swimming 2	
Special gym 8	-
(This includes men taking Field	_
Geology and men physically un-	
able to take regular gym.)	
Mass gym21	0
(This includes work with Indian	•
clubs, dumbbells, calisthenics, etc.)	
clubs, dumbbells, calisthenics, etc.) Wrestling	5
Wrestling 3	~
Wrestling 3 Soccer 6	0
Wrestling 3	0 5

PROF. ARTHUR KLEIN HONORED

Professor A. W. Klein, M.E., '99, of the Department of Mechanical Engineering, Lehigh University, was recently appointed an Honorary Vice-President of the American Society of Mechanical Engineers by the Council of the Society and represented the Society at the inauguration of Doctor Richards on October 14.

Lehigh Men Prominent in the A. S. of C. E.

In the standing and special committees of the American Society of Civil Engineers, Lehigh University is unusually well represented as follows:

Committee on Technical Activities and Publications—C. W. Hudson, '89.

Committee to Codify Present Practice on the Bearing Value of Soils for Foundations-W. J. Douglas, '94.

Committee on Bridge Design and Construction—C. W. Hudson, '89.

Committee on Contract Standard Claus-

-J. H. Brillhart, '04. Committee on Industrial Education-

Herman Schneider, '94.

Committee on Stresses of Structural Steel—F. O. DuFour, '96; Prof. R. J. Fogg; L. D. Rights, '93.
C. W. Hudson, '89, is a member of the

Board of Directors of the Society.

MARRIAGES

Class of 1899
On October 10, 1922, William Piez to Miss Rena
Burnham, of New Orleans, La. At home at The
Ridgely, Birmingham, Ala.

Class of 1905

On September 16, 1922, Ray C. Kautz to Miss Florence Beiler, of New York City. At home at Day Island, Tacoma, Washington.

Class of 1906

On November 11, 1922, David H. Brillhart to Miss Elizabeth Lehr, of Allentown, Pa. At home at 68 West Market Street, Bethlehem, Pa.

Class of 1916

On October 16, 1920, Russell B. Kirby to Miss Carrie C. Junod, of Allentown, Pa.

Class of 1918

On April 22, 1922, Samuel B. Downey to Miss Helen R. Barrett, of Baltimore, Md. At home, 2319 Guilford Avenue, Baltimore, Md. On October 14, 1922, Leon A. Fritchman to Miss Mildred Reeve, of Medford, N. J.

Class of 1920

On October 25, 1922, August Concilio to Miss Anna F. Nolan, of Bethlehem, Pa. On October 16, 1922. Norman A. Newell to Miss Katherine Charity Miller, of Allentown, Pa. At home, 187 Tontine Avenue, Lyndhurst, N. J.

Class of 1921 On October 28, 1922, Frank W. Miller to Miss Elizabeth Mae Hunt, of Easton, Pa.

BIRTHS

Class of 1921

A son, to Mr. and Mrs. William M. Hall, Jr., of Whiting, Indiana, on October 20, 1922.

DEATHS

Class of 1897

Carl John Roelker died on July 7, 1922. He was born in Osnabruck, Germany, in October, 1873. His education included two years at Lehigh University and a year in the drafting room of the Bureau of Steam Engineering, U. S. N. From 1897 until 1905 he engaged in marine engineering with various companies in the United States, and was also instructor in mechanical engineering at Virginia Mechanics Institute, Richmond, 1901-1903. He became a member of the firm of Roelker & Lee, consulting engineers of Richmond, in 1905, and remained in this position up to the time of his death. his death.

Class of 1898

Class of 1898

Charles Edward Webster, B.A., '98, M.D. (Columbia Univ., '02), died at the Lankenau Hospital, Philadelphia, Pa., on November 5, 1922, of septic pneumonia. He was ill only a short time but was unable to rally because of the effects of poison gas from which he has suffered since the War. He was in reality a war victim and adds another to that sad but glorious roll of honor of Lehigh's sons who gave their lives for us. He was born in Cincinnatti, O., on November 14, 1877. He spent his youth in Bethlehem preparing for Lehigh at Uhlrich's Preparatory School. After graduating from Lehigh he attended the College of Physicians and Surgeons at Columbia University, where he won the coveted Harsen prize. After service in the Presbyterian Hospital he practiced in New York until June, 1917, when he enlisted, go

vice in the Preshyterian Hospital he practiced in New York until June, 1917, when he enlisted, going overseas the following September. He ranked as major in the World War, in which he earned a brilliant record, being twice decorated by the French government for bravery. After the armistice he went as a Red Cross physician to Erivan, Armenia, and later to Warsaw, Poland, returning home about a year ago. At the time of his death he was government physician of the Philadelphia department of the neuro-phychiatric soldiers. He is survived by his mother and one sister, Miss Margaret D. Webster, Bethlehem.

We men of Lehigh are proud of his record and

sorrow with his bereaved mother and sister in their great loss.

Class of 1919

Charles A. Kepner died on October 19, 1922, at the Allentown Hospital after an illness of three weeks. After attending Lehigh for a year he en-tered Temple University, where he received a medical degree in 1921. He was serving his interneship at the Samaritan Hospital, Philadelphia, when he was taken ill.

PERSONALS

In the November BULLETIN we published a list of the lost, strayed or stolen members of every class which has adopted the Class Guarantee Plan. This has resulted in the discovery of the whereabouts of a number of men for whom we had no address. Where such addresses are given under the personals we will mark the paragraph "Found," to indicate that we had no previous address.

Class of 1883

A. E. Forstall writes that Allen Ames is no longer in New York City. He hears that Ames is in Syracuse but has been unable to secure his street address.

Found—William Hoopes, c/o The Aluminum Co., Oliver Bldg., Pittsburgh, Pa. Found—W. S. Maharg, East 3rd Street, Los Angeles, Calif.

Class of 1888

Charles J. Parker is now Chief Fire Protection Engineer, New York Central Lines, with an office at 466 Lexington Avenue, New York City.

Class of **1889**

F. J. Carman has changed his Washington, D. C., address from 1351 Que Street to 1806 Lamont

Class of 1890

Asa E. Phillips, who was abroad for almost a year, returned early this fall and opened an office as Consulting Engr. in Washington, D. C. (See advertising pages.)

Class of 1891
Elias Vonderhorst, Consulting Engineer, has moved his office from 18 Old Slip to 30 Church Street, New York City. Tel. Cortlandt, 1888.

Class of 1893

H. D. ("High & Dry") McCaskey writes me from Central Point, Oregon, insisting I am the "Abou Ben Adem of our time." Sounds had, especially in view of the way the Moslems are cutting up just now. However, as he calls the rest of you "Rip Van Winkles," I feel I got off easily. Abou did a lot of dreaming, but he wasn't nearly the sleeny-head Rip was. sleepy-head Rip was.

Jas E. Miller has moved from 192 Christopher Street, Montclair, N. J., to 16 Monroe Place, Brooklyn, N. Y.

W. R. Stinemetz is now living at 760 Hill Avenue, Wilkinsburg, Pa. "Billy" is still with the Westinghouse Co.

Class of 1894

Found-A. A. Howitz, 111 W. Mowry Street, Chester, Pa.

Found-R. B. Kernohan, c/o Jones & Laughlin Steel Co., Pittsburgh, Pa.

Found—E. E. Seyfert, 26 So. 15th Street, Philadelphia, Pa.

Found-C. R. Yerrick, Scranton, Pa.

Class of 1896

George R. Enscoe has a son at the Bethlehem Preparatory School who expects to enter Lehigh

C. H. Morgan has left Altoona. The post-office reports his address as Southern Bldg., Washington, D. C.

George F. Womrath is now living at 3215 Irving

CLASS GUARANTEE PLAN STANDING OF CLASSES NOVEMBER 22, 1922

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Avenue, South, Minneapolis, Minn. He is Supt., Board of Education, or some such thing. Tell us what it is, George.

Class of 1897

Going strong is '97's Executive Committee. They are working up a great class organization.

Ross N. Hood is living at Drexel Hill, Delaware

Class of 1898

The Class Guarantee Committee, headed by "Hank" Scovil, is simply tearing the roof off. They have averaged a new active member per day for the last month. It shows what a constant succession of follow-up letters will do and proves again that any live committee can easily line up the entire class as members of the Alumni Association.

ciation.

The Philadelphia post-office informs us that H.
L. Adams has moved and left no address. "Sic him, Hank."

him, Hank."

Found—H. W. Fitzgerald, 175 Chapin Street,
Binghampton, N. Y.
Found—J. G. Foresman, 4223 Osage Street,
Philadelphia, Pa.
E. R. Frisby is now Associate Physicist, U. S.
Bureau of Standards, Washington, D. C.
Found—W. G. Hare, 41 Arguello Road, San
Francisco, Calif.
Found—B. H. Harrison, 1423 N. Charles Street,
Baltimore Md.

Baltimore, Md. Found—R. R. Lukens, c/o Penna.-Ohio Electric

Co., Youngstown, Ohio.
Found—F. R. Lundy, Insurance, 26 E. Third
Street, Williamsport, Pa.
Colonel Harry Wilbur, U. S. A., has been retired from active service and is at present living

in Sayannah, Ga.
Samuel A. Yorks is reported as having died
some years ago. Our investigation indicates this
report is correct although no one, even his fraternity, can give any date of his death.

Class of 1899

"Billy" Gummere, in addition to his duties with the Roebling Co., is President of the First National Bank of Roebling.

Class of 1900

Class of 1900

I sure have tried hard to get someone to act as chairman of the 100% Membership Campaign for this class. Here is a bunch of the finest chaps that ever went to Lehigh. All that is needed is a little work to make them one of our livest Alumni Classes. "Deacon" Canfield has about half given his consent to act as chairman. Won't you fellows who care for Lehigh and have a pride in your class write D. H. Canfield, Middletown, N. Y., telling nim you will back him up if he will take up this work? It sure hurts to see this gold-mine of college spirit lying unworked.

Class of 1901

Lost—E. S. Harrar has left Ashtabula, O. Where is he?

Charles W. Startsman is now Secy. & Mgr., The Colson Co. of Phila., 1712 Ludlow Street, Phila-delphia, Pa.

Class of 1902

Lost-Daniel Agnews has left Detroit, Mich. Where is he?

William F. Berger is now Plant Engineer, Aberdeen Proving Ground, Aberdeen, Md. Berger has a fine family of six children, five of them old enough to go to school. You can bet that keeps him hustling. But it's worth it, Bill.

Aiken Simons writes from Buenos Aires, Argentine, S. A., asking that we stop sending mail to his old address in Wilmington, Del. He says he has no permanent address at present.

Class of 1903

Arch E. Olpp, Congressman from New Jersey, writes "Art" Frick that although he's mighty busy he has time to work for the class of '03 in the matters of the Class Guarantee and the Twentleth

A. W. Wright has resigned as Chief Engineer, Eastern Steel Co., Pottsville, Pa., and accepted a position as Chief Engineer, Hamilton & Chambers Co., Inc., 29 Broadway, New York City.

Class of 1904

R. D. Kavanaugh is now living at 2967 West Grand Blvd., Detroit, Mich.

Arthur J. Weston has resigned from the office of Executive Secretary of the Intercollegiate Newspaper Association. Weston spent the past summer in Europe visiting all countries as far east as Austria. In France he visited the battle areas and reports that all three American cemeteries are being cared for in splendid fashion.

C. E. Yost, who is with the Palo Verde Mutual Water Co., has changed his address from Blythe to Hynes, Calif.

Class of 1905

Talk about your "retort courteous." Dan Berg is sure there with that kind of stuff. Put this one in your pipe, "Shine," and smoke up. With this kind of birds as the class leaders it is no wonder "05 is a humdinger class. I figure the "literary gent" has got nothing on the "captain of industry." Dear Okey:

A good many of my friends have suggested that I go after you and Kirk in connection with the rather nasty communication from him you printed in the November BULLETIN. I was a little tempted to do it, but fortunately read the following at just

about that time:

A RESOLUTION.

To set an example of abstinence from peets; ex-sonal controversies and of toleration for every-thing but lying; to be indifferent as to whether the work is recognized as mine or not, so long as it HUXLEY. To set an example of abstinence from petty per-Yours truly, DAN BERG.

Found—T. B. Gillian, 4534 Smith Road, S. Norwood, Cincinnatti, O.
Ray C. Kautz has left Moweaqua, Ill., and opened an office as Engineering Contractor, 246
So. Cliff Avenue, Tacoma, Wash.
Wallace Martin is Chaplain, The Harriott Pinckney Home for Seamen, East Bay and Market Streets, Charleston, S. C.

Found-H. S. Regester, Pikesville, Md.

TRUMBO & ROSZEL Manufacturers of PINE AND HARDWOOD LUMBER 402 Trust Building DURHAM, N. C. October 14, 1922.

Walter R. Okeson, Esq., Drown Hall, Bethlehem, Pa.

Dear Okey:

Dear Okey:
You don't know me from the side of a cow, but I met you many years ago, when we both were young men, I a little younger than you. I was a scrub throughout my college career, even if I did wear the "L", and I am one of those famous men Lehigh turns out (without looking).
I have a letter from Funk, '05, which I enclose, and I enclose my check for \$7.00. Put me with '05 or nowhere

'05 or nowhere.

If there is anything I can do for Lehigh in this neck of the woods, write me and I will do it. I have twin sons who will play the halves in '28.

Will I see you in 1925?

Very truly yours.

DUN ROSZEL '05.

DICK ROSZEL, '05.

Found—Major A. L. P. Sands, U. S. A., c/o War Dept., Washington, D. C.

Joseph Shema has abandoned engineering and now in the furniture business, 145-147 Noble Avenue, Crafton, Pa.

Found—P. G. Spilsbury is President, Arizona Industrial Congress, Phoenix, Arizona.

Class of 1906

Edgar C. Weinsheimer has moved from Hollywood to 1623 W. Santa Barbara Avenue, Los Angeles, Calif.

Class of 1907

Lost—E. R. Camp is no longer in the Crozier Bldg., Philadelphia. Where is he?

F. E. Hayes has left Lincoln, Nebr., and is now in Port Arthur, Texas.

R. S. Porter is with the Interstate Commerce Commission, 405 Horner Bldg., Washington, D. C.

Martin Schmid, who is on a wedding trip to Europe, writes from Edinburgh, on November 4, saying, "The only reason I'll miss the Lehigh-Lafayette game this year is because it isn't played over here."

Found-J. T. Waddill, Richmond, Va.

George H. Wartman, who is Secretary of the Kew Gardens Inn, Kew Gardens, L. I., is also Secretary-Treasurer, Keystone State Hotel Asso-ciation, operating Hotel Redington, Wilkes-Barre, Pa. This is his present address.

Class of 1908

Found—W. E. McCann, 213 E. Meade Street, Germantown, Philadelphia, Pa. Mighty glad to find him, too, as he is a member of the Class Reunion Committee.

George K. Reel, President of the Detroit Lehigh Club, has moved from Detroit to Sturgis, Mich. He is still with the Greer Mfg. Co., I think.

Jonathan Rowland, Jr., is with George R. Camp, Merchandise Broker, 135 So. Second Street, Philadelphia. Pa.

N. W. H. Schafer is now Division Engr., P. & R. Rwy., Tamaqua, Pa.

A. N. Van Vleck has located in New York as Chief Structural Engr. for J. E. R. Carpenter, Architect, 598 Madison Avenue, New York City. He's a peach, Van. I've sold him lots of steel.

Class of 1909

Found—F. R. Adelhelm, 6145 Lancaster Pike, Philadelphia, Pa.

The Stone Franklin Co., of New York, write me that J. L. Hayes' home address is 1606 E. Lanvale Street, Baltimore, Md.

Lloyd C. Taylor is now with the Auto Car Co., Richmond, Va.

Class of 1910

George M. Force is with the American Tel. & Tel. Co., Room 835, 195 Broadway, New York City.

Found-R. B. Mathews, 10 Broad Street, Flemington, N. J.

Found—F. M. Sayford, c/o Sayford Specialty Co., Brooklyn, N. Y. Found—W. B. Wells, 3011 Grayson Avenue,

Baltimore, Md.

Class of 1911

E. A. Ball has moved from Quakertown, Pa., to 1051 Twenty-second Avenue, North, St. Petersburg, Fla

E. F. Ford is with M. A. Hanna & Co., 2118 Dime Savings Bank Bldg., Detroit, Mich.

Class of 1912

G. F. Alrich writes that he has accepted a position as Instructor in Mathematics at Carnegie Institute of Technology and is living at 2348 Sherbrook Street, Squirrel Hill, Pittsburgh, Pa.

"Bill" Colling writes from 1739-A North Bronson Avenue, Hollywood, Calif., "Am here helping Will Hayes make better pictures!!"

Lost—The post-office advises me that Frank B. Miller has removed from 1815 Dennison Ave., Cleveland, O., and left no address.

Walter I. Nevius, Class Treasurer, is now Mechanical Engr., Commercial Solvents Corp., Terre Haute, Ind.

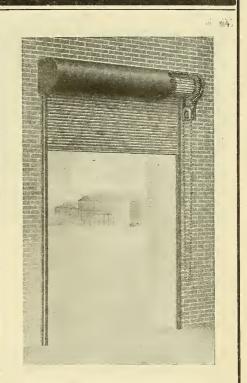
H. W. Porter has left Ann Arbor and is now with the Jackson X-ray and Radium Clinic, 928 E. Main Street, Jackson, Mich. He writes: "My brother's name is Lafayette, but don't let that deter the team from exerting efforts to wallop another Lafayette. I can take care of this one."

We owe an apology to E. E. Yake. In the November Bulletin we published his name as one for which we had no address. This was a clerical error, for we always have an up-to-date address for Yake. He is one of the fellows we can count on.

Class of 1913

Found—L. T. Carpenter is with the Athol Mfg. Co., of Marysville, Mich., but I am not sure of his exact location. I think he is in Detroit.

Found-T. H. Cook, 920 Clairmount Avenue,



A Standard for 46 Years.

Wilson Rolling Steel Doors roll up overhead and out of the way and are easy to operate. They are unequalled for use in warehouses, factories, piers, garages and commercial buildings.

Hundreds of them have been in use for many years and show little indication of age, or signs of the hard usage to which they have been put.



Catalog, details and prices will be forwarded on request.

The J. G. Wilson Corporation

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J. E. Middledith, '99, Secretary and Treasurer



Bowker & Houseworth Company

INCORPORATED

318 Pennsylvania Building Philadelphia

> GENERAL INSURANCE and SURETY BONDS

OUR ORGANIZATION AFFORDS A HIGH TYPE OF BROKERAGE SERVICE

C. F. LINCOLN, '11, SECY.

Detroit, Mich. He is Foreman, Automobile Spring Shop, Detroit Steel Products Co., Detroit, Mich.

Found—I. T. Fuhrman, 826 South 57th Avenue, Philadelphia, Pa.

The postoffice advises us that W. N. Gambrill has left Crystal Falls, Mich., and is now at 8036 Brush Street, Detroit, Mich.

Found-A. B. Gorman, Glen Avenue, Station E, Baltimore, Md.

R. N. Kocher is Head of Science Dept., High School for Boys, Reading, Pa.

R. J. Rems is in the Automobile business at 113 So. 7th Street, Allentown, Pa.

Found-F. B. Speed, Jr., Catonsville, Md.

E. E. Wright has left Niagara Falls and is now at 30 E. 42nd Streea, New York City. He is still with the National Carbon Co.

Found—L. C. Babcock, 1530 Chestnut Street, Philadelphia, Pa.

Stewart C. Dutot has left Niagara Falls, N. Y., and is now living at 316 N. 7th Street, Stroudsturg, Pa.

E. B. C. Goyne has been moved by the Bethlehem Steel Corp. from St. Louis to Pittsburgh, where he is now District Sales Agent, with offices in the First National Bank Bldg.

John P. Faherty has resigned as head of De-liveries and Shipments Section, Material Sales Division, Emergency Fleet Corp., and is now with the Aberthaw Const. Co., in their sales offices, West End Trust Bldg., Philadelphia, Pa.

Walter Schrempel writes: "R. M. Neff has been properly passed by the examining board and is now a member of the 1914 Committee. It is hard to believe, but fellows outside of the Committee are writing in for some work to do." No wonder 1914 is going so strong.

Louis Thornburg, who has been an officer in the Civil Eng. Corps of the Navy along with Dick Gifford and Eddie Siebert, had a six months' sick leave this year, which he spent in touring Europe. He expects to be retired from the Navy about January 1.

George F. Wolfe writes he has left Florida and is back again in the Hoosier State. He is connected with the International Steel & Iron Co., of Evansville, Ind., and living at 1313 Washington Avenue, that city.

Class of 1915

Found—J. S. Bennett, 6310 Woodbine Avenue, Philadelphia, Pa.

Found—R. M. Neff, '14, reports that A. F. Ennis is in Cleveland in the retail Coal business. Anyone know his street address?

E. C. Higgins has moved from Kansas City to Tulsa, Okla.

Captain Henry D. Jay, U. S. A., has been trans-rred from Fort Sam Houston, Texas, to Fort ferred Sill, Okla.

C. J. Leutz writes to change his mailing address from Austinville, Va., to the Horse Head Inn, Palmerton, Pa.

Class of 1916

Found—R. I. Baker, Grasselli Chemical Co., Elizabeth, N. J.

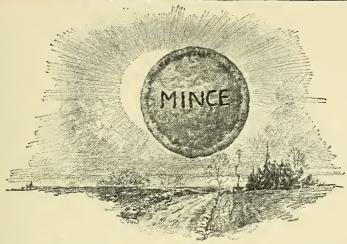
E. J. Clement, who is New York representative of C. C. Hall, Inc., of Rochester, N. Y., has moved from Brooklyn to 160 Claremont Avenue, New York City. His office is 110 Hudson Street.

-Louis Mardaga's mail is returned from Lost-145 N. 52nd Street, Philadelphia, Pa.

Lost—Mail addressed to Donald Markle, 862 Ostrom Avenue, Syracuse, N. Y., is returned marked, "Removed. Left no address."

Clifford W. Shaw is now Asst. Patent Attorney for the Westinghouse Elec. & Mfg. Co. His ad-dress is P. O. Box 21, East Pittsburgh, Pa. The letter in which he enclosed his dues and subscription has a paragraph that is well worth reproducing:

"Don't forget to credit the Class of 1916 with one more subscription. I have made it a practice whenever I meet anyone from Lehigh to ask them if they have sent in their dues and subscription



Eclipse of the sun

This is the month when the sun is outshone, and we mortals draw greater warmth and sustenance from that homely provender—mince pie.

It is the warmth of the holiday spirit, which causes human hearts to glow when temperatures are lowest. Mother's cooking—the family united—Christmas trees and crackling logs—what would this world be without them?

In promoting the family good cheer the college man's part is such that modesty often blinds him to it.

It would hardly occur to the glee club man to sing over the songs of Alma Mater for the still Dearer One at home.

The football man would scarcely suspect that his younger brother is dying to have him drop-kick for the "fellers."

The Prom leader would not presume to think that among those sisters who have been waiting to share his agility at fox-trot may be his own sister.

And in general, college men would scorn to believe that any conversational prowess they might possess on books, professors or campus activities could possibly interest a certain Gentleman Who Foots the Bills.

But just try it, all of you. The welcome you get will warm the cockles of your heart.

This suggestion, amid sighs as they look back across the years, is the best way a bunch of old grads here know of wishing you "Merry Christmas".

Published in the interest of Electrical Development by n Institution that will be helped by whatever helps the Industry.

Western Electric Company

This advertisement is one of a series in student publications. It may remind alumni of their opportunity to help the undergraduate, by suggestion and advice, to get more out of his four years. for this year. Nobody has yet told me it was none of my damned business but I have noticed a thoughtful expression flit across the faces of one or two. The one I spoke to this morning said, "Yes, Have you?" This letter and check is a sort of salve for my conscience on account of the lie I told."

L. G. Stem is Paint Technologist, New Jersey Zinc Co., Palmerton, Pa.

Harold E. White writes that he is now with the Southern Manganese Co., Anniston, Ala.

Class of 1917

W. A. Bornemann is Engineer with the Carrier Engineering Co., of Philadelphia.

W. W. Gilmore is at present in attendance at the Harvard Graduate School of Business Administration, with an address of 73 Thorndike Street, Arlington, Mass.

Louis G. Mudge is with The First National Corporation. Room 111 West Monroe Street, Chicago, III.

. C. R. Parrish is Manager, Noxen Sand Co., Kingston, Pa.

Class of 1918

R. D. Blake and W. E. Tizard are living in the Suncourt Apartments, Phoenix, Ariz.

S. B. ("Slats") Downey has recently changed positions and is now designer of steel and reenforced concrete for Richard K. Meade & Co., Baltimore, Md. He is living at 2319 Guildford Avenue.

Joseph F. Carlz has moved from Wollaston, Mass., to 71 North Street, Somerville, Mass.

Robert S. Lambert is a student in the General Theological Seminary, New York City, and living at 28 Jones Street, that city.

Buchanan sends an address for R. H. Lindsay of 1712 Broadway, Boulder, Colo.

Class of 1919

H. S. Bull is Instructor, Dept. of Elec. Eng., Univ. of Michigan, and is living at 702 Lawrence Street, Ann Arbor, Mich.

George A. Clewell is in the Illuminating Eng. Bureau, Westinghouse Lamp Co., 165 Broadway, New York City.

G. H. Gildersleeve is in the Radio Dept., General Electric Co., Schenectady, N. Y.

Edwin A. Hartney is Associate Pastor, St. Mark's Methodist Episcopal Church, Ocean Avenue and Beverly Road, Brooklyn, N. Y.

Fred H. Hesselschwerdt, formerly with the Acheson Graphite Co., Buffalo, N. Y., is now Industrial Engineer at the Niagara Falls Plant of the same company. I reckon Fred's got a good job, 'cause his engagement to Miss Alma M. McKee, of Buffalo, has just been announced.

John B. Heilman is back with the Aluminum Co. of America as Asst., Technical Control Dept. of the Massena Plant. He is living at 71 Bishop Avenue, Massena, N. Y.

F. D. ("Red") Nawrath took a fall out of the Editor of the New Brunswick Home News, who published some criticisms of Lehigh's athletic field and the attitude of Bethlehem people towards Lehigh. "Red" sure told him where to get off.

James D. Sourber is Instructor in French, Yale Univ,, and is living at 80 Sherman Avenue, New Haven, Conn.

Class of 1920

Howard Bunn is Sales Engr., Haynes-Stellite Co., 30 E. 42nd Street, New York City.

Edward L. Forstall has gone to Pittsburgh. He

is still with the Bell Telephone Co. and is doing work in Inductive Interference. He is living at 509 South Highland Avenue.

William A. France is manufacturing Refractory Brick. Office is at 117 So. 16th Street, Philadelphia, Pa.

J. A. Gardy has an office in the Hart Bldg., Doylestown, Pa., where he is engaged in selling Advertising Service.

C. G. Goodell is with the Chesapeake & Potomac Telephone Co., Washington, D. C., and living at 1810 California St., N. W.

Wm. H. Hunton and his bride are living at Rose Court Apartments, No. 9, 526 East Fall Creek Boulevard, Indianapolis, Ind.

Solomon Hoffman has secured a position in the Engineering Inspection Dept., Western Electric Co., and at present is located in Rochester, N. Y., where he is living at the Y. M. C. A.

E. D. Hollinshead is a Gas Engineer, 258 N. Park Street, East Orange, N. J.

P. N. Israel is with the Worthington Pump & Mfg. Co., 115 Broadway, New York City.

V. E. ("Swede") Johnson writes me from La Tuque, Quebec, Canada, where he is working with the Laurentide Co., Ltd.

B. R. Nevins is with the Philadelphia Electric Co., 10th and Chestnut Streets, Philadelphia.

J. L. Rosenmiller, who is with Henry L. Doherty & Co., has been transferred from Oklahoma City to Bartlesville, Okla.

A. D. Spillman is Asst. Secy., Electrochemical Society, Columbia University, New York City.

W. S. Terry is Telephone Engineer, Amer. Tel. & Tel. Co., 311 Washington Street, Chicago, Ill.

John I. Timmons is associated in business with his father, under the firm name Chas. B. Timmons & Sons, Dry Goods, Furniture and Rugs, Snow Hill, Md.

Class of 1921

Carl R. Berner is living at 5213 Archer Street, Germantown, Philadelphia, Pa.

L. F. Christman is 2nd Asst. County Engineer of Berks County, Pa., and is living at Womelsdorf, Pa.

H. A. Heiligman is with E. J. Lavino & Co., Ores, Alloys and Refractories, Plymouth Meeting, Pa., and is living at 1328 Powell Street, Norristown, Pa.

A. S. ("Buzz") Herrington is in the Bond Dept.,

HILDENBERGER & GOODWIN

"Insurance plus Service"

WILBUR TRUST BUILDING
BETHLEHEM, PA.

Carrier Fngineering Corporation



750 FRELINGHUYSEN AVE. NEWARK, N.J.
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W. A. BORNEMANN, '17,
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WASHING, AUTOMATIC
TEMPERATURE AND
HUMIDITY REGULATION.

Moore, Leonard & Lynch, Frick Bldg., Pittsburgh,

C. P. Maurer, Jr., is Mining Engr., Lehigh Valley Coal Co., Hazleton, Pa.

A. J. Miller is with The Careva Co., Inc., Plumbing, Heating, Steam and Mill Supplies, York, Pa.

James W. Morgan sends an address of Box 33, Lilly Pa. He is with the Lilly Coal Co. J. G. Powles is Lubrication Engr., Gillespie Petroleum Products Co., Phoenix, Ariz., and lives in the Suncourt Apts., with R. D. Blake and W. E. '18.

R. D. Raff is Engineer, Diamond Portland Cement Co., and is living at 407 Sixteenth Street, N. W., Canton, O.

Paul Ritchie is Asst. Adjutant, Malvern J. Nabb Post, No. 82, American Legion, Millville, N. J. He lives at 572 Columbia Ave.

W. K. Whitmore is handling Fire Insurance, 501 Mercantile Bldg., Oklahoma City, Okla.

Class of 1922

Paul F. Benz is Asst. Mgr., Pierce, Butler & erce, Radiator Works, Huntingdon, Pa. Res.: 1025 Mifflin Street.

P. E. Bowman is in the Eng. Dept., Westing-house Lamp Co., Bloomfield, N. J. Res.; 84 Ella Street.

C. G. Carpenter is in the Service Dept., Bethlehem Steel Co., Bethlehem, Pa. Res.: 18 W. 4th Street.

Samuel Cottrell is with the Trojan Powder Co., Hunsicker Bldg., Allentown, Pa. Res.: Y. M. Res.: Y. M.

Colgate Craig is Experimental Engr., Edison amp Works, General Elec. Co., Harrison, N. J. Res.: 268 Claremont Avenue, Montclair, N. J. Res.:

G. G. Davis is Student Engr., Worthington Pump & Machinery Corp., Worthington Works, Harrison, N. J. Res.: 107 N. 18th Street, East Orange, N. J.

G. L. Gaiser is Draftsman, McClintic-Marshall Const. Co., 50 Church Street, New York City. Res.: 117 Mapes Ave., Newark, N. J.

W. E. Gerber is in the Shipping Dept., Home Furniture Co., York, Pa. Res.: 367 E. Philadelphia Street.

O. V. Greene is Metallurgist, P. & R. Rwy. Co., Reading, Pa. Res.: 106 N. 4th Street.

Show-Chuan Huang is Engineer in Training, K. M. A., Tongshan, Chihli, China.

W. F. Hindry is in the Special Sales Dept., Procter & Schwartz (Mfrs. of Drying Machinery), 7th Street and Tabor Road, Philadelphia, Pa. Res.: 1313 Eleanor St., Logan, Philadelphia, Pa.

R. D. Hughes is with the General Chemical Co., Long Island City, N. Y. Res.: 204 Park Street, Montclair, N. J.

C. L. Knoderer is teaching Math. & Physics in the Middletown (Pa.) High School. He has just been elected Asst. Principal. Res.: 236 Elm St., Steelton, Pa.

W. H. Lutz is Cadet Engineer, Elec. Station Design & Const. Dept., Philadelphia Elec. Co., 23rd and Market Streets, Philadelphia. Res.: 118 So. 52nd Street.

H. W. M Altoona, Pa. Morgan's address is Lock Box 55,

A. T. Prigohzy is with the Holoplane Co., lumination Engrs., 342 Madison Ave., New York City. He is also taking graduate work in Geology at Columbia University. Res.: 242 Bay 10th Street, Brooklyn, N. Y.

L. C. Ricketts is Special Apprentice, Bucyrus o., So. Milwaukee, Wis. Res.: 922 Madison Avenue.

Earl Stimson, Jr., is Special Apprentice, B. & O. R. R., Mt. Clare Shops, Baltimore, Md. Res.: 524 Woodlawn Road.

T. M. Switz is Chemical Engr., Westinghouse Lamp Co., Eng. Dept., Bloomfield, N. J. Res.: 62 Midland Avenue, East Orange, N. J.

A. S. Thaeler has gone to sea on one of the boats of the Luckenbach Steamship Co., of Brooklyn, N. Y. Address: c/o Luckenbach Steamship Co., Inc., Foct of 35th Street, Brooklyn, N. Y. (At sea.)

L. V. Van Nort has just moved to 36 Cambridge Place, Brooklyn, N. Y. As noted in the October Bulletin, he is with the New York Telephone Co.

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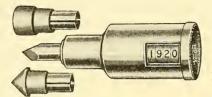
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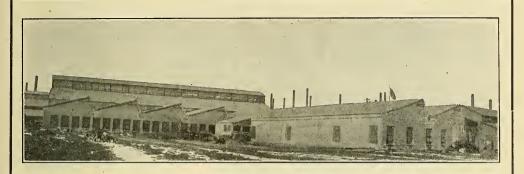
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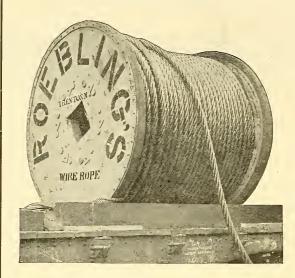
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Bringing more Daylight into Industrial Buildings

Dr. George M. Price, writing on "The Importance of Light in Factories," in "The Modern Factory," states: "Light is an essential working condition in all industrial establishments, and is also of paramount influence in the preservation of the health of the workers. There is no condition within industrial establishments to which so little attention is given as proper lighting and illumination. Especially is this the case in many of the factories in the United States. A prominent investigator, who had extensive opportunities to make observations of industrial establishments in Europe as well as in America, states: 'I have seen so many mills and other works miserably lighted, that bad light is the most conspicuous and general defect of American factory premises.'

"My own investigations for the New York State Factory Commission supported this view. In these investigations it was found that 36.7% of the laundries inspected, 49.2% of the candy factories, 48.4% of the printing places, 50% of the chemical establishments, were inadequately lighted. There was hardly a trade investigated without finding a large number of inadequately lighted establishments."

Inadequate and defective lighting of industrial buildings is not confined to the establishments in New York State alone. The same conditions prevail in most sections of the country.

Such conditions as mentioned above are entirely opposed to the laws of health, sanitation and efficiency. Wherever poor lighting conditions prevail, there must be a corresponding loss of efficiency and output both in quality and in quantity. American industry is not using nearly enough daylight and sunlight in its buildings. Every endeavor should be made to use as much as possible of daylight for lighting purposes. To obtain this it is of course necessary that the rays of daylight and sunlight are permitted to enter the interior of the buildings as freely as possible, with the important modification that the direct rays of the sun must be properly diffused to prevent glare and eyestrain. A glass especially made for this purpose is known as Factrolite, and is recommended for the windows of industrial plants. Windows should be kept clean if the maximum amount of daylight is to pass through the glass, but the effort will be well repaid by the benefits secured.

In the presence of poor lighting, we cannot expect men to work with the same enthusiasm as when a well lighted working place has been provided. The physical surroundings have a deep effect upon the sentiments of the employes, and where bad working conditions are allowed to prevail, there is invariably a lessening of morale and satisfaction created thereby. Neglecting to utilize what nature has so bounteously provided, daylight, and which is so essential toward industrial efficiency, we have an instance of wastefulness, but now that the importance of good lighting is becoming recognized, undoubtedly more attention will be given by progressive employers to furnishing the means which are essential for their workers to secure and maintain the efficiency, which counts for so much in the success of any industrial concern in this competitive age.

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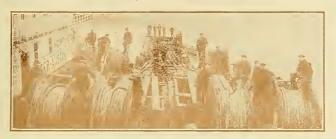
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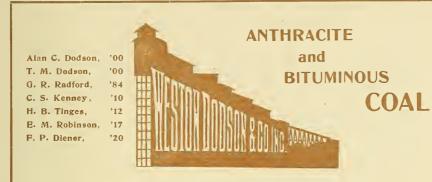
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